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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/848,734	05/19/2004	Richard A. Armell	112,835	7329

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EXAMINER

STEPHENSON, DANIEL P

ART UNIT PAPER NUMBER

3672

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/848,734

Applicant(s)

ARMELL, RICHARD A.

Examiner

Daniel P. Stephenson

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11 and 15 is/are rejected.
- 7) ☒ Claim(s) 10, 12-14 and 16-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cascade of intensifiers must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3672

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Murer et al. Murer et al. (Fig. 1 and 2) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that is substantially triangular in shape, with a set of 3 faces. Pivoting against these faces is a number of centralizers (2). The centralizers are actuated by contact with a piston (8) powered through an intensifier (13). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body. The intensifier has a first face perpendicular to the bore. The surface area of the face is greater than the operating area of the piston.

4. Claims 1-9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Pittard et al. Pittard et al. (Fig. 1, 3 and 4) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that is substantially triangular in shape, with a set of 3 faces. Pivoting against these faces is a number of centralizers (23). The centralizers are actuated by contact with a piston (45) powered through an intensifier (37). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body. The intensifier has a first face perpendicular to the bore. The surface area of the face is greater than the operating area of the piston.

5. Claims 1-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanford. Sanford (Fig. 1 and 2) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that

Art Unit: 3672

is substantially triangular in shape, with a set of 3 faces. Pivoting against these faces is a number of centralizers (32). The centralizers are actuated by contact with a piston (18). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body.

6. Claims 1-7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinley et al. Kinley et al. (Fig. 5E, 5F, 10, 10A and 10D) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that is polyhedral in shape, with a set of 6 faces. Pivoting against three of the faces are centralizers (31,32,40). The centralizers are actuated by contact with a piston (227). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body.

#### ***Allowable Subject Matter***

7. Claims 10, 12-14 and 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Emanuel et al., Johnson, Garrison, Turzillo, Brown, Furse et al., Boe, Davis et al. and the pre-grant publications to Vandrentham Susman et al. and Eppink all show similar elements to the present invention.

Art Unit: 3672

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

DPS 